GUIDEBOOK
ENTERPRISEWIDE BI
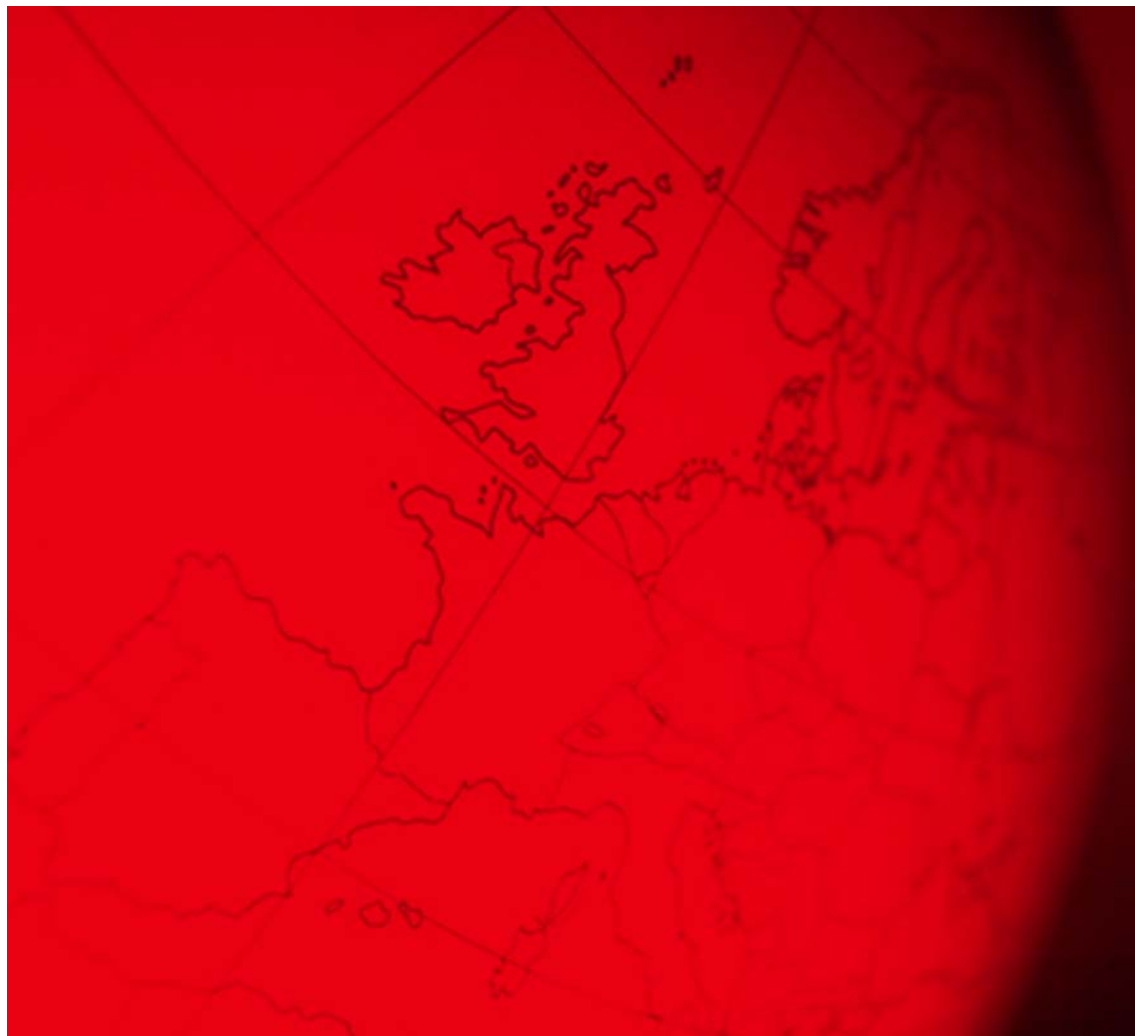
THE BOTTOM LINE
Companies looking to increase returns on their business intelligence (BI) investments should standardize their use of BI across their enterprise as a way to increase user adoption, reduce costs, and improve workflows.

SITUATION
Many companies that have invested in business intelligence are achieving significant returns as the result of improvements to both visibility and employee productivity. Once these successes are achieved, companies often mandate broader use of BI so that the returns on BI can be maximized. However, cost effectively deploying, adopting, and utilizing BI with consistency across an enterprise often proves difficult. Some of the challenges include:

- Isolated deployments. At many companies, BI is deployed and adopted, but only on a sporadic, department-by-department, or project-by-project basis. Additionally, companies typically have a variety of BI tools deployed, which increases costs and makes it difficult for people to uniformly use and interpret data.
- Insufficient knowledge exchange. Even when companies deploy BI broadly, it is typically difficult to identify best practices and pass them on to others.
- High costs. In the absence of sufficient internal knowledge exchange about BI best practices, a company's BI projects will continually rely on outsiders for help, which increases the consulting costs and lowers the ROI on these projects. Worse, BI projects can be so isolated that key players don't know that they may have access to BI under an enterprise license agreement, so they incur unnecessary software and maintenance costs.
- User dissatisfaction. For many people, the user interfaces, speed, reporting, and data provided by their company's BI platform are either incorrect or too difficult to use.

Combined, all of these issues mean that even though many companies have invested in BI and Performance Management (PM), there is a costly lack of standardization and adoption which result in insufficient returns on BI investments. However, Nucleus finds that when companies adopt an effort to standardize practices for these applications across its enterprise, it becomes far easier to achieve benefits, as well as higher returns on investment. This guidebook is intended to help users of BI and PM to understand the benefits of standardization, how to achieve them, and how to maximize them.

FIVE BEST PRACTICES
Successful standardization relies on knowledge of a company's culture, challenges and use of BI, as well as championing and sponsorship. Nucleus found that companies followed a number of best practices in order to not only create a mandate for standardization, but also enlist the support and enthusiasm of end users.

Assess needs and readiness
The first step in standardization should be a detailed analysis of both the organization's needs and its readiness for the transition to standardization. First,

the organization should be evaluated to determine how many different BI solutions and vendors are utilized, because although standardization has broader business benefits, the first and most readily achieved benefit is from the elimination of redundant BI vendor relationships. A major capital equipment manufacturer said, "*A major goal with standardization was to eliminate most of the costs related to about 250 BI applications, and retarget that money so that IT can do more with its shrinking budget.*"

Then key workflows such as financial reporting, budget analysis, and sales performance analyses should be analyzed to see how costly they are as the result of a lack of standardization.

Identifying opportunities for improvements as the result of standardization will be key to both establishing a mandate and creating early wins.

For example, Nucleus spoke to one company that standardized because its 13 business each used different tools — including spreadsheets and different BI applications to create departmental financial statements.

Start small
Creating valuable wins early on is critical to the success of a BI standardization initiative. Standardization will eventually take on breadth and require investments in the form of sponsorship, internal marquee customers, and money. When standardization has early wins, people become far more dedicated as champions, investors, and participants if they are confident of the benefits to come. Nucleus finds that companies are likely to be successful if they first apply standardization to a subset of their organization that can readily benefit from it. This is where early research comes in handy.

Standardization teams can acquire a strong internal champion by creating an early cost-reduction or productivity-improving win with standardization.

Early projects should address a broken workflow or management blind spot that is easily fixed with standardization. The keys here are to select something small in scope, which is readily fixed, and will catch the eye of senior management.   One company first standardized the workflows around their budgeting and reporting. Because this enabled senior management to perform budget-versus-actual analyses, senior sponsorship intensified and momentum for standardization improved.

 A large aerospace company said, "*At first, there was a luke-warm response to standardization. But we created a win in one of our newest and strategically important business units. We used this to show the success potential to other groups.*"

In propagating standardization across the enterprise, companies should proceed with caution where necessary. In some instances, BI can be deeply entrenched and critical to operations affecting sales, compliance, or risk. These should be considered higher risk areas for standardization that should adopt later in the

process when adoption and best practices have been fine tuned. Prioritizing departmental adoption in this way in will not only help to manage operational risk, but prevent disruptions from harming the standardization mandate.

Make sure senior management buys in

Standardizing on one BI vendor means eliminating other vendors and broadening BI practices. For a number of employees this will mean changes to workflows and possibly retraining on a new BI platform. These potential problems, combined with the general tendency of people to resist change, make it necessary to strengthen standardization initiatives with support from senior management.

An ROI-based business case is the best way to acquire senior management sponsorship for standardization.

Nucleus finds that when a standardization initiative has this level of sponsorship, people find it risky not to assist with standardization, and adoption of the new brand and practices is far more rapid. When making the case to senior management and potential sponsors, be sure to emphasize the following benefits of standardization:

- Better data. When BI cubes, reports, dashboards, and other deliverables are created in a standardized environment, people are able to view and define data the same way.
- Improved productivity. When everyone in an organization views, defines, and utilizes data consistently, more time is spent working with data and less time is spent reconciling it.
- Higher ROI. Centralized and strategic management of BI purchases and deployments leads to lower software costs. This, combined with improved productivity, means higher ROI.

One company said, "*Standardization was mandated by our CIO because he wanted to simplify the BI environment without increasing the budget, which was actually decreasing.*"

Accommodate your culture

Understanding your corporate culture will be key to developing the proper mandate for your standardization initiative. The more hierarchical your culture is, the more your mandate should be top-down in nature. The more flat or entrepreneurial an organization is the more bottom-up the mandate should be. For example, Nucleus has found that organizations that are bureaucratic or subject to regulation — such as military organizations, banks, and insurance companies — succeed with a top-down approach in which sponsorship from powerful members of senior management played a key role.

Since many organizations are somewhere between these two extremes, here are a few things to keep in mind:

- A top-down mandate will have the advantage of both forcing people to adopt and accommodate a timetable set by management. But the drawbacks will be that the standardization team can be perceived as being heavy handed, and if

end users feel alienated, the team will lose access to information critical to the process.

- A bottom-up mandate will foster creativity and access to the people who will adopt standardization practices, but make access to resources and senior sponsorship more difficult to achieve.
- An ad-hoc mandate, or a mandate from the standardization team alone, will carry little authority or access to resources, which will jeopardize the standardization effort.

Use the carrot more than the stick

Companies are often most successful when they aggressively advocate standardization's benefits — often in person. Advocacy is often done in a road show format, with standardization team members traveling to their companies' various locations and educating managers and end users about the benefits of standardization.

> The more people can participate in the standardization process, the more they will adopt BI and the higher will be your ROI.

At the managerial level, people should know that even though they may need to invest in new training, these costs will be outweighed by the benefits of more efficient workflows, shared IT costs, shared software costs, and better access to more uniformly understood data. At the end-user level, the most effective advocacy involves live software demonstrations that illustrate how standardization will make their workflows less labor intensive and complex.

FIVE FINE TUNINGS

Standardization is about more than creating uniformity. Nucleus finds that companies get the most value from standardization when they dedicate resources to the propagation of best practices and use standardization activities to broaden both the user base and the standardization mandate.

Propagate best practices

One of the most valuable benefits of standardization is the identification and propagation of best practices. When BI and PM applications and practices are stranded in silos, departments that are considering adoption of these applications or trying to maximize their benefits are denied internal knowledge about how best to use them. One of the best ways to do this is to establish a BI competency center (BICC), which would consolidate people who have expertise and enable them to provide their knowledge to others across the organization, so that BI and PM successes more repeatable, cost effective, and readily achieved. A large European insurer said, "*Our super-user population helps pass best practices on to a lot of other users. They are effectively a virtual BICC.*"   Centralizing best practices with a core team also reduces project costs.

> A large aerospace manufacturer said, "*By centralizing BI talent in a BICC, there are fewer people needed to administer projects. Right now, six people in the BICC administer 40 projects. Without the BICC, this level of activity would have needed at least 20 administrators.*"

Some of the benefits of a BICC include:

- Reduced support costs. When a BICC is available to propagate and socialize best practices, end users are less likely to call the help desk for BI assistance.

- Improved alignment. Staffing a BICC with people from the IT department as well as line of business means IT knows more about what the line of business needs from BI and can deliver more of the functionality that they need.

- Reduced deployment costs. BICCs are typically repositories of repeatable applications and best practices that can be used across an enterprise to reduce deployment costs and cycle times.

> Establishing a BICC, which can reduce costs and propagate productivity-improving uses of BI, can be key to increasing the ROI on BI.

Here are a few things to keep in mind when establishing a BICC:

- Financing. The way a BICC is financed should change as its use matures. Early in the life of a BICC, it should be financed centrally, so that cost is not an inhibitor to its use. As a BICC matures, it can be financed by users under a subscription or per-query basis.

- Staffing. The more broadly BI standardization stakeholders are represented, the more people will turn to it and the more value it will be able to give. A BICC should include power users, business users, and IT.

- Structure. The structure of a BICC should match the structure and culture of the organization it supports. A flat organization whose users typically have similar needs can have a centralized BICC as part of its operations or IT department. But the more dispersed the user base and the more diverse the required functionality, the more distributed — and possibly virtualized — a BICC should be.

Then go beyond best practices

Ideally, a BICC is about more than best practices. When BI adopters are accustomed to using a BICC to accelerate their BI adoption and projects, an organization's BICC should move onto more value-added services that can extend the benefits of standardization by targeting cost reductions in the following areas:

- Software. The people in a BICC are uniquely suited for BI vendor management. This goes beyond vendor management, since they know how much BI is needed, how it can generate benefits, and therefore how much it should cost. This staff also makes it easy for project teams to acquire licenses without incurring unnecessary software costs.

- Integration. Organizations continually struggle with integrating the many heterogeneous applications they acquire as the result of growth or acquisitions. One way to solve this problem is to deploy a unified approach to BI that not only eliminates the one-off BI purchases that were made for specific enterprise applications, but also to create one platform and set of standards for retrieving and interpreting the data in different applications and databases.

- Consulting. A BICC can reduce BI-related consulting costs by both providing internal consulting at lower-than-market cost and creating a well-practiced body of repeatable deployment techniques that minimize the need for outside help.

- Training. BICC staff can provide company- and department-specific BI training more efficiently and cost effectively than outsiders.

> A major capital equipment manufacturer said, "*Our BICC gives the business units lots of tactical savings. They can have a project set up and started in just 10 hours, including user rules, licenses, as well as development, test, and production environments.*"

Maximize the user base

Establishing a BICC and aggressively championing standardization both enable BI proponents to discover people who are not using BI that should be, or user populations who are underutilizing BI. Companies tend to underestimate how broadly BI can be utilized across their organizations.

> Standardization provides opportunities to extend BI to more user populations, which increases ROI, especially if a company has an enterprise license agreement.

Virtually every employee is a potential end user, even if only on an ad-hoc basis. For example, analysts who underwrite accounts at an insurance company occasionally have customer interactions that may require data analysis or create sales opportunities. Since BI functionality comes in many forms and at many different price points, it's possible to both be aggressive in propagating adoption while also minimizing costs. A large aerospace company that standardized on BI said, "*Since standardizing and setting up our BICC, the number of users has gone from 5,000 to 15,000.*"

Make sure junior management buys in

The less senior people in an organization will usually adopt and participate in standardization because they have to. But they will provide critical momentum and new BI-related ideas to standardization sponsors because they want to. Nucleus finds that when end users are given a key role throughout the standardization process, initial successes will be easier to achieve, as will the broadening of benefits.

> The more a standardization team works with end users, the more a company will be able to use BI to improve productivity and reduce costs.

This is because the end users of BI and the data gatherers know more than anyone else about data. They know how it is gathered, where it resides, and how it is used. As a result, they are the best people to turn to in order to find out where standardization will generate the most benefits. One large user of BI that standardized said, "*Once we got going, the end users were key. They're the ones who can propose new areas where value can be added if it is standardized.*" One of the best ways to keep people engaged in the process is to form a steering committee or build an ad-hoc support team that participates in weekly conference calls.

Keep senior management onboard

Once senior management has bought in, it is important to keep them on board and increase their enthusiasm about standardized BI.

A research lab for the U.S. military said, ""*We give our senior people powerful query functions to let them do their own analysis, and gradually to less senior people as well. This tends to increases adoption and usage because of word of mouth.*"

The best way to do this is to give them as much end-user driven functionality as possible. When these sponsors can use BI to perform their own ad-hoc, experimental, and iterative analyses, they reach more actionable conclusions, they get more value from BI, and they become more likely to share the benefits with colleagues at the top of an organization.

BI is an extremely social application and its adoption can spread like a fad. Promoting this among your most senior champions will improve your mandate.

It is important to keep in mind that BI is one of the most social tools in an organization. Users tend to be surprised at the ease and speed with which they can analyze data as the result of BI. The more senior management is likely to share BI techniques with peers, the more solid their sponsorship will be, and the stronger will be the adoption of standardization that they champion.

FIVE MISSTEPS TO AVOID

People typically react to standardization with both resistance and misperceptions about how broad the benefits of standardization can be. Nucleus found that companies are most successful when they were aware of these potential issues and avoided a few common missteps.

Don't think of it as vendor consolidation

When both publicizing the benefits of standardization and obtaining executive sponsorship, companies should be sure to articulate the broader business benefits of standardization. End users, potential champions, and departmental leaders need to know that standardization is less about selecting one vendor and far more about faster decision making, easier workflows, and improved consistency of data use and interpretation. If people think that standardization is only about vendor consolidation, then participation will be limited, end users will not contribute valuable ideas to the standardization team, and the broader benefits may not be achieved. Additionally, downplaying the fact that standardization will focus on one vendor will help mollify any sponsors of vendors that did not become the BI standard vendor.

Don't let politics get in the way

Technological changes and deployments typically run into resistance as the result of cultural or political issues, and BI standardization is no exception. Although there are significant benefits to standardization, it initially requires sharing of knowledge, adopting of new practices, and retraining. Additionally, standardizing

on one vendor means that IT professionals who backed the non-standard BI vendor may lose face. All of these are sources of resistance that can threaten a standardization effort in its early stages. Standardization advocates should be ready to reach to their senior sponsors, internal marquee customers — and possibly human resources — and be more heavy handed with their mandate if necessary. Companies should also be careful to avoid delays as the result of disputes about whether IT or business owns opportunities, problems, or responsibilities.

A large European insurer said, "Don't let people get into arguments about who owns what. The CFO's office doesn't care about that, so don't lose time to it."

Don't forget that you are selling

Companies pursuing a standardization effort should be prepared to both achieve early wins with standardization and publicize the benefits of those wins. A research lab for the U.S. military said, "*We are watching to see what decisions are made with the data and trying to quantify both the value of the decision and the ability to reach conclusions faster.*" Here are some steps that could be followed to take advantage of an early marquee project:

- Research. Standardization advocates should interview key managers to identify workflows and functions that could be improved with more standardized creation and use of data.
- Prioritize. Potential projects should be ranked according to their potential value. The projects with the least cost and the most breadth and repeatability of benefits should have first priority. Simplicity is also important. The benefits of your marquee project will need to be publicized, so it is important to select a project that can be readily explained to all potential adopters of standardization. A simple rule of thumb to apply is that if your mother wouldn't understand it, then it is too complex for publicity.
- Deploy. Apply standardization practices and benefits to your marquee project.
- Quantify. Following the deployment, improvements to key performance indicators such as productivity and decision making effectiveness should be measured. Ideally, the value of the improvements in productivity or decision making should be quantified.
- Publicize. Use e-mail campaigns, word of mouth, face-to-face meetings, and road show presentations to use describe the marquee project and its benefits in order to let people know that standardization brings more value than change.

A large European insurer said, "*It helps the mandate to know that research for some decision making processes that used to take 70 hours now take only three.*"

Don't overlook the integration benefits

Companies typically have so many heterogeneous applications in their operating environments that they are challenged to integrate them get value on the data within them. One solution is to standardize both the way your BI platform acquires data and presents it to end users, so that everyone not only has access to it, but also interprets it the same way. IT departments should think of standardization as

a peer to other integration tools such as service-oriented architecture and composite applications.

Don't let exceptions become the rule

When it comes time to standardize on one BI platform, there will always be departments or teams that want to opt out. This should not be permitted the vast majority of the time. If one or two departments succeed in avoiding the costs and work required for standardization, many others will follow suit. Standardization is most powerful when the uniformity of practices is adopted broadly across the organization. If this is not achieved, neither will many of the benefits of standardization.

While it's important for the vast majority of users to participate in standardization, many companies will have small pockets of specialty groups that should not participate. For example, an insurance company will need to have a separate, non-standard BI tool for actuaries to utilize for underwriting purposes. Similarly, a petroleum company's geologists will need a different tool than the rest of the organization. Leaving these types of groups out of the standardization mandate from the start will prevent any potential rancor or backlash against the standardization initiative. Companies should also consider allowing departments to opt out of standardization where it is likely to disrupt key operations.

CONCLUSION

Although many companies have made significant investments in BI and PM, they struggle to achieve benefits from them because of insufficient adoption and inconsistent practices. Both BI and PM generate far more benefits when their use and best practices are made more uniform and propagated across a company's enterprise. Companies considering standardization should be prepared to enhance such initiatives with strong sponsorship, dedicate assets to the propagation of best practices, and carefully manage cultural issues. Not to be confused with vendor consolidation, companies should turn to standardization as a way to increase the uniformity and value of their workflows, data content, data usage, and decision making.